AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A light-emitting diode comprising:

a semiconductor substrate; and

a layered structure comprising an AlGaInP type compound semiconductor material and provided on the semiconductor substrate,

wherein the layered structure comprises:

a light-emitting structure composed of a pair of cladding layers and an active layer for emitting light provided between the pair of cladding layers; and

a current diffusion layer comprising an AlGaInP type material which is lattice-mismatched with the light-emitting structure, wherein a lattice mismatch Δ a/a of the current diffusion layer with respect to the light-emitting structure defined by the following expression is -1% or smaller:

$$\Delta a/a = (a_d - a_e)/a_e$$

where a_d is a lattice constant of the current diffusion layer, and a_e is a lattice constant of the light-emitting structure, and

wherein crystal of the semiconductor substrate is inclined by 8° (degrees) to 20° (20 degrees) in a [110] direction with respect to a (100) plane thereof.

2. (Cancelled)

3. (Previously Presented) A light-emitting diode according to claim 1, wherein a composition of the current diffusion layer is selected in such a manner that the current diffusion layer becomes transparent with respect to a wavelength of light emitted from the light-emitting structure.

4. (Previously Presented) A light-emitting diode according to claim 1, wherein a composition of the current diffusion layer is expressed as $(Al_xGa_{1-x})_yIn_{1-y}P$, and x is set in the range of 0.01 to 0.05 and 1-y is set in the range of 0.01 to 0.30 in the composition.

5. (Currently Amended) A light-emitting diode ~~according to claim 1,~~ comprising:

a semiconductor substrate; and

a layered structure comprising an AlGaInP type compound semiconductor material and provided on the semiconductor substrate,

wherein the layered structure comprises:

a light-emitting structure composed of a pair of cladding layers and an active layer for emitting light provided between the pair of cladding layers; and

a current diffusion layer comprising an AlGaInP type material which is lattice-mismatched with the light-emitting structure, wherein a lattice mismatch Δ a/a of the current diffusion layer with respect to the light-emitting structure defined by the following expression is -1% or smaller:

$$\Delta a/a = (a_d - a_e)/a_e$$

where a_d is a lattice constant of the current diffusion layer, and a_e is a lattice constant of the light-emitting structure, and

wherein a composition of the current diffusion layer is expressed as $(Al_xGa_{1-x})_yIn_{1-y}P$, and at least one of a value of x and a value of 1-y in the composition varies along a thickness direction of the layered structure.

6. (Currently Amended) A light-emitting diode ~~according to claim 1,~~ comprising:

a semiconductor substrate; and

a layered structure comprising an AlGaInP type compound semiconductor material and provided on the semiconductor substrate,

wherein the layered structure comprises:

a light-emitting structure composed of a pair of cladding layers and an active layer for emitting light provided between the pair of cladding layers; and

a current diffusion layer comprising an AlGaInP type material which is lattice-mismatched with the light-emitting structure, wherein a lattice mismatch Δ a/a of the current diffusion layer with respect to the light-emitting structure defined by the following expression is -1% or smaller:

$$\Delta a/a = (a_d - a_e)/a_e$$

where a_d is a lattice constant of the current diffusion layer, and a_e is a lattice constant of the light-emitting structure, and

wherein a composition of the current diffusion layer is expressed as $(Al_xGa_{1-x})_yIn_{1-y}P$, and at least one of a value of x and a value of 1-y in the composition decreases in a step-like manner along a thickness direction of the layered structure from an interface with the light-emitting structure toward opposite end of the current diffusion layer.

7. (Currently Amended) A light-emitting diode ~~according to claim 1,~~ comprising:

a semiconductor substrate; and

a layered structure comprising an AlGaInP type compound semiconductor material and provided on the semiconductor substrate,

wherein the layered structure comprises:

a light-emitting structure composed of a pair of cladding layers and an active layer for emitting light provided between the pair of cladding layers; and

a current diffusion layer comprising an AlGaInP type material which is lattice-mismatched with the light-emitting structure, wherein a lattice mismatch Δ a/a of the current diffusion layer with respect to the light-emitting structure defined by the following expression is -1% or smaller:

$$\Delta a/a = (a_d - a_e)/a_e$$

where a_d is a lattice constant of the current diffusion layer, and a_e is a lattice constant of the light-emitting structure, and

wherein a composition of the current diffusion layer is expressed as $(Al_xGa_{1-x})_yIn_{1-y}P$, and at least one of a value of x and a value of 1-y in the composition varies in a step-like manner along a thickness direction of the layered structure from an interface with the light-emitting structure toward opposite end of the current diffusion layer, thereby controlling a resistivity of the current diffusion layer in the thickness direction.

8. (Previously Presented) A light-emitting diode according to claim 5, wherein both the values of x and 1-y in the composition of the current diffusion layer vary, independent of each other.

9. (Previously Presented) A light-emitting diode according to claim 6, wherein both the values of x and 1-y in the composition of the current diffusion layer decrease, independent of each other.

10. (Previously Presented) A light-emitting diode according to claim 7, wherein both the values of x and 1-y in the composition of the current diffusion layer vary, independent of each other.

11. (Currently Amended) A light-emitting diode, comprising:

a semiconductor substrate; and

a layered structure comprising an AlGaInP type compound semiconductor material provided on the semiconductor substrate, the layered structure comprising:

a light-emitting structure comprising of a pair of cladding layers and an active layer for emitting light provided between the pair of cladding layers; and

a current diffusion layer comprising an AlGaInP type compound semiconductor material, the current diffusion layer being lattice-mismatched with the light-emitting structure, and

wherein crystal of the semiconductor substrate is inclined by 8° (degrees) to 20° (20 degrees) in a [110] direction with respect to a (100) plane thereof.

12. (Previously Presented) The light-emitting diode as in claim 11, wherein a lattice mismatch Δ a/a of the current diffusion layer with respect to the light-emitting structure is defined by

$$\Delta a/a = (a_d - a_e)/a_e$$

where a_d is a lattice constant of the current diffusion layer, and a_e is a lattice constant of the light-emitting structure and

wherein crystal of the semiconductor substrate is inclined by 8° (degrees) to 20° (20 degrees) in a [110] direction with respect to a (100) plane thereof.

13. (Previously Presented) The light-emitting device as in claim 12, wherein the lattice mismatch is -1% or smaller.

14. (Currently Amended) A light-emitting diode, comprising:

a semiconductor substrate; and

a layered structure comprising an AlGaInP type compound semiconductor material provided on the semiconductor substrate, the layered structure comprising:

a light-emitting structure comprising a pair of cladding layers and an active layer for emitting light provided between the pair of cladding layers;

a current diffusion layer comprising an AlGaInP type material which is lattice-mismatched with the light-emitting structure and the semiconductor substrate; and

wherein

the semiconductor substrate is inclined in a [011] direction with respect to a (100) plane thereof, and

wherein crystal of the semiconductor substrate is inclined by 8° (degrees) to 20° (20 degrees) in a [110] direction with respect to a (100) plane thereof.

15. (Cancelled)

16. (Cancelled)